

Amendments to the Claims

Please amend and/or cancel claims 1-22 so that the current status of all claims is as follows:

1. (currently amended) A cellular radiotelephone signal, [of the type including] comprising a main symmetrical bidirectional channel, including a main uplink and a main downlink, providing in particular low or medium speed transmission of signaling and control data and information,

wherein said signal includes at least one additional channel solely assigned to downlink, with no corresponding symmetrical uplink channel, providing in particular high speed data transmission wherein said additional channel implements a multi-carrier technology providing distribution of data in the time/frequency space

wherein said additional channel has a complex envelope responding to the following

equation:

$$x(t) = \sum_{m,n} a_{m,n} i^{m+n} \mathfrak{J}(t-nT) e^{i\pi m t / T}$$

where:

- m is an integer representing the frequential dimension;
- n is an integer representing the temporal dimension;
- t represents time;
- T is the time symbol;
- a_{m,n} is a real digital coefficient chosen from a pre-set alphabet;
- \mathfrak{J} is the prototype IOTA function, which is a function identical to its Fourier Transform.

2. (cancelled)

3. (cancelled)

4. (cancelled)

5. (cancelled)

6. (cancelled)

7. (cancelled)

8. (cancelled)

9. (cancelled)

10. (cancelled)

11. (cancelled)

12. (cancelled)

13. (cancelled)

14. (cancelled)

15. (cancelled)

16. (cancelled)

17. (cancelled)

18. (cancelled)

19. (cancelled)

20. (cancelled)

21. (cancelled)

22. (cancelled)